Flourishing in a dictatorship: Agfa's marketing and the Nazi regime

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Abstract

Purpose – The purpose of this paper is to understand how Agfa, a division of IG Farben and Germany's leading producer of photographic equipment, adapted its marketing strategy to the new political environment created by the Nazi regime. This was a time when many consumer goods manufacturers suffered from the state-driven reallocation of resources favoring the armament industry. Agfa, however, expanded its production well into the war.

Design/methodology/approach – This case study is based on archival records of Agfa's sales department.

Findings – This paper shows that Hitler's armament drive left room for non-essential consumer goods such as cameras, film, and photographic paper as they fitted the regime's consumption policy, as well as its import and foreign exchange policy. A pioneer in marketing, Agfa was able to secure its growth strategy and its room to maneuver by focusing its product and promotion program on the socioeconomic needs of the "Volksgemeinschaft" and the "Four Year Plan".

Originality/value – This paper sheds new light on the often-underestimated role of consumption during the "Third Reich." Furthermore, it supports the evolutionary – rather than revolutionary – nature of the history of marketing practice in Germany, as Agfa's interwar marketing policy features many sophisticated modern elements prior to the "Marketing Revolution" of the 1960s.

Keywords Photographic industry, Chemical industries, Political marketing, Nazi Germany, Dictatorship, Consumption, Amateur photography, Consumer goods marketing, Photographic products

Paper type Case study

Introduction: private corporations and consumption policy in the "Third Reich"

This paper examines the hitherto unknown history of Agfa's rise to prominence during the Nazi era. It centers on Agfa's marketing strategies and analyzes their success in the new political environment. In so doing, this case study addresses two controversies: the debate concerning corporations' room to maneuver within the dictatorship, and that about the status of consumer goods production in this era. In the first debate, Hayes (2009) assumes that the restrictive conditions of the Nazi state left little room for economic autonomy; Buchheim and Scherner (2009), in contrast, emphasize firms' room to maneuver and their power to negotiate. The economy, they point out, remained decentralized and structured around private capital. Moreover, the regime lacked the

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know-how to pursue rearmament without the private sector. Businesses overall remained relatively autonomous and followed normal business considerations. The dictatorship had to essentially buy companies' cooperation with incentives like purchasing guaranties, subsidies, and one-off gains. Although the spiral of intervention escalated after 1933, most companies could respond flexibly for some time (Ziegler, 2012). Hayes, in turn, points to well-known cases like Junkers, Messerschmidt, BRABAG, and Salzgitter, in which the regime brutally expropriated or blackmailed firms, or created compliant state and party companies. In his view, "business as usual" yielded to a "hybrid" command economy wherein the state exploited market mechanisms. The regime knew how to punish firms when incentives failed to achieve the desired results. While Hayes thoroughly researched the chemical giant corporations IG Farben (despite neglecting Agfa's consumer business within it) and Degussa, the state threatened to administer or expropriate other firms, too. Consequently, in Hayes's view, firms found it ever more difficult and eventually impossible to stick to traditional commercial considerations and to position themselves in relation to long-term civil trends.

These two positions paint rather different pictures of entrepreneurs: Hayes presents them as the servants of a strong dictatorship merely following orders; Buchheim and Scherner, conversely, see them as autonomous, skilled strategists capable of exploiting a weak dictatorship and avoiding commercially disadvantageous interventions. Yet the constellation was more complicated: both types of entrepreneurs existed, and many variables determined their room to maneuver, including the relevance to armaments of a firm's products, their effects on the overall balance of trade and payments, as well as a firm's position in the Nazi polyarchy. Therefore, we prefer a more dynamic approach to studying businesses under the regime that takes private companies' active engagement in the economy as a given as it seeks to determine how and to what extent they were active.

The second controversy concerns the status of consumer goods production continues to be dominated by the idea that arms production completely drove the Nazi state economy. Some have claimed that anything not "at least indirectly involved in arms production [. . .] languished" (Herbst, 1993, p. 157). In his economic history of the "Third Reich," Adam Tooze (2006) barely mentions the consumer goods industry. As he sees it, the regime recklessly accelerated arms production early on, without much concern for consumers' needs. Buchheim (2001, p. 657), too, asserts that "the growth of private consumption was severely restricted" and the "consumer economy [. . .] strangled."

Hartmut Berghoff (2012, p. 139) holds an opposing view: he finds that the "regime did not pursue a stringent policy of austerity. Instead, autarkic and pro-consumerist impulses coexisted." Connecting this perspective with studies by Mason (1971), Schäfer (2009), and Wiesen (2011), he argues that the regime followed a course halfway between focusing on arms production and securing political loyalty. Given the hardship and hunger that had prompted the revolution in Germany in 1918, the regime could not implement a tough austerity policy but had to work to shore upmass support for Hitler's regime, which was still unstable. Consequently, the regime regarded securing a minimum level for basic needs like food and clothing as vital. Another fundamental principle of its consumption policy was announcing and actually ushering in increases in the production of sought-after consumer goods, particularly

for prestige projects not critical to the balance of trade. These policies gave the consumer goods industry significant opportunities for growth (Berghoff, 2007).

Case studies shed light on differentiations lost in the macroeconomic picture. However, they sometimes point to singular situations. To determine the representativeness of a particular case study, many such studies need to be available for comparison. The few existing studies of consumer goods producers prove that companies successfully expanded even during the armaments boom – at least those not dependent on imported intermediate products like the severely restricted textile industry (Höschle, 2004). Up into the late 1930s, firms could often build on Weimar trends and introduce new products.

There are several examples of such successes. Electrical appliances, radios, tourism, cinema, and even the American consumption icon Coca-Cola boomed during the "Third Reich" (Berghoff, 2009). The regime also left room for the pursuit of individualistic free-time activities. Trendy youth-oriented objects, like the harmonica, spread across Germany. Hohner quadrupled its sales of instruments between 1933 and 1939 and managed to maintain at least prewar sales levels until 1942 (Berghoff, 2006, pp. 361, 465).

Sometimes lobbying helped entrepreneurs to win the regime's favor. Reemtsma, Germany's leading cigarette manufacturer, continued the branding campaign it had started in the 1920s after Philipp Reemtsma had bought Hermann Göring's protection. This enabled him to utilize pictures of prominent Nazis in his advertising – a practice that was otherwise prohibited. The collectors' photo album "Adolf Hitler" made its way into one in ten households. Cigarette consumption rose in the Reich through 1941 before dropping rapidly in 1942 when many factories were closed. Enjoying a market share of about 60 percent and leading a competition-crushing cartel, Reemtsma increased its profits 14-fold between 1933 and 1940 (Jacobs, 2008, pp. 111-64).

Sectors in which consumption was closely intertwined with the Wehrmacht also experienced stunning growth. One example is Bertelsmann, a mid-sized printing and publishing firm that were undergoing a transition from theological to literary publishing around 1930. Although this development continued after 1933, growth only reached new dimensions after 1936, when Bertelsmann bet on the mass production of popular literature and embraced materials that conveyed Volkish contents or glorified the war. The circulation of its series "Suspenseful Stories," pulp fiction for children and youth, rose from 693,000 in 1937 to 6,800,000 in 1940. Throughout the 1930s, Bertelsmann pursued modern direct-marketing strategies including mail order and door-to-door sales. During the war, it acquired a new and highly profitable market with wartime editions for the troops. From 1936, sales grew dramatically while profits at first stagnated and then reached almost fantastic levels. By 1941, with a margin of 41.1 percent, sales had increased seven-fold and profits 30-fold since 1933 (Friedländer *et al.*, 2002; Berghoff, 2010).

The demand of millions of soldiers was crucial. Soldiers were privileged consumers who received products via military procurement offices or masses of free army post packages. This market blazed the trail for hitherto unimaginable mass sales that would continue after the war. The debate about Nazi consumption policy usually fails to perceive soldiers as mass consumers. Their mass consumption was part of the military complex, even though they were consuming products normally classified as consumer goods.

The history of Agfa films and cameras fits precisely within this framework. In support of Wiesen's model, which highlights the dynamics of continuity, compatibility, and autonomy in the "Nazi marketplace" (Wiesen, 2011, pp. 18-19), we will demonstrate that Agfa maintained considerable autonomy in its marketing strategy by slightly altering its product policy and corporate communications.

Thus, this case study relates not only to the economic history of the "Third Reich", but also to broader research in business and marketing history. The history of consumption and marketing has so far been little influenced by the general historiographical trend toward "bringing the state back in." The neoclassical perspective of the state as a passive guardian protecting the market from corporate misconduct through business legislation still prevails in popular textbooks (Keller and Kotler, 2006, p. 94). Some recent studies, by contrast, draw a more balanced picture by showing how political and institutional settings can function as a catalyst for private business opportunities (Kipping, 2010). This applies not only to heavy industries but also to consumer goods producers and markets. As the case of Germany shows, during the twentieth century both democratic and totalitarian governments legitimized themselves to a large extent through the issue of satisfying the socioeconomic needs of their consumer citizens (Berghoff, 2012, pp. 126-127). Private business enterprises act as intermediates in this relationship between citizens and the state, adjusting supply and demand with the tools of corporate marketing. This applies to the case presented here. As Agfa's goals were often highly compatible with the regime's goals, the company could pursue the business model it had developed before 1933.

The outset: Agfa and the photographic market before 1933

Agfa was founded in 1867, initially manufacturing aniline dyestuffs and other intermediate chemical products. In 1888, it diversified to include production of photographic chemicals, dry plates, amateur roll film, and cinematographic film. In the 1920s, the photochemical trade became its core business, and by 1927, Agfa had a 20 percent market share worldwide, making it the second most important producer of photosensitized materials. Only Kodak, with a 75 percent market share, was larger (Wall Street Journal, 1927). In 1925, Agfa merged with other German chemical companies to form the giant conglomerate IG Farbenindustrie AG (IG Farben), at which point film production dominated its business, accounting for 49.4 percent of its turnover (Löhnert and Mustraph, 1989, pp. 85-8).

During the two decades of IG Farben (1925-1945), Agfa functioned as a semi-autonomous division within the multi-divisional concern and was restructured as a photographic equipment manufacturer. It implemented the "loss leader" model: selling cameras at a loss to stimulate film sales. Up to now, research on IG Farben has concentrated on heavy chemicals such as synthetic fuel and rubber as well as the company's participation in the war and the Holocaust (Plumpe, 1990; Hayes, 2001). This research neglected Agfa's sales to consumers in a highly competitive international market. This production was openly at cross-purposes with rearmament, since it primarily addressed non-military needs.

Agfa's success primarily resulted from the up-to-date marketing methods it had developed. These included strategies like segmentation, marketing management, and consumer behavior research, which were regarded as key categories of modern marketing in the 1960s (Fullerton, 1988; Jones and Richardson, 2007). The Agfa

division benefited greatly from the experiences of the larger companies that had joined IG Farben. Most saliently, Agfa was strengthened as an umbrella brand applied to all of IG Farben's photographic products. Agfa introduced a single-source concept, which was exceptional in the German photographic industry, where most firms concentrated on either photochemistry or fine mechanics like camera parts. Another important step was concentrating all marketing matters in a sales department in Berlin, which coordinated the marketing mix, i.e. it suggested new products, commissioned market research, and set prices. Hand in hand with the sales executives, an in-house advertising department developed ad campaigns and a media plan. It also had authority over the staff in the R&D departments within the manufacturing facilities in Munich (camera), Wolfen (film), and Leverkusen (photographic paper). The directors of the Agfa branch always supported the suggestions of the sales department, which was increasingly shaped by former Bayer manager Bruno Uhl. By 1932, the "old" Agfa leadership – mostly scientists who had also been in charge of marketing – had been replaced.

After 1930, Agfa's long-term sales policy became more market-than-technology-driven. This finding contradicts the narrative that portrays German industry as generally product-oriented. Although Agfa traditionally saw itself as a high-end quality manufacturer, it produced ever less sophisticated and less expensive cameras to expand its markets.

It began to favor pushing the production of low-margin cameras to stimulate the sale of high-margin film and paper. This "mass marketing" concept (Tedlow, 1993) was designed to appeal to about 2,000,000 amateur photographers with the most uniform and inexpensive cameras possible (Starl, 1995, p. 98). These were primarily new customers who did not yet possess any photographic equipment. Agfa consciously chose to target the mass market rather than the high-end market many German competitors still favored. In 1928, Agfa introduced its mid-range folding camera line "Agfa Billy" and in 1930 the low-priced entry-level series "Agfa Box." Agfa's source of inspiration was its American competitor Kodak, which, back in 1888, had introduced an integrated system of amateur photography to the mass market that combined sales of inexpensive, simple-to-operate cameras already fitted with unexposed film with in-house printing and enlarging services (Tedlow, 1997). Soon, brick-and-mortar retailers became the dominant channel for distribution and image developing, yet the "all from a single source" idea emerged as an integral feature of the industry as mass manufacturers like Kodak and Agfa sought growth through vertical integration and line extension. Agfa's emulation of Kodak's marketing strategy qualifies as a classic example of "Americanization" in the German economy, although it had already taken place before 1945 (Schröter, 2005). Well into the postwar era, Kodak remained the world-market leader and the model for practically all competitors with high-volume production. When Agfa's home market became more important for Kodak during the interwar period, it triggered stiff competition between the two companies.

Agfa's late entry into the camera business – compared to its German competitors – prompted extensive ad campaigns, the best known of which was the "Price Box" campaign in 1932 (Götz, 2002, pp. 20-24). For 4 RM, a price that did not cover the cost, the company sold 865,733 box-type cameras in Germany alone (IG Farben to RJF, 1934, p. 8). That was more than four times as many as in 1929, the best pre-crisis year (Table I). This new finding – that a consumer product of elastic demand caught on to

Year	Roll film (pieces) World	Roll film (pieces) Thereof: Germany	Cameras (pieces) World	Cameras (pieces) Thereof: Germany	Photographic paper (sq. meter) World	Photographic paper (sq. meter) Thereof: Germany
1926	6,200,000	1,600,000	45,000	5,199	610,200	299,000
1927	6,800,000	2,100,000	84,000	19,624	905,500	326,000
1928	10,600,000	3,800,000	130,000	111,896	1,197,700	539,000
1929	14,600,000	5,700,000	260,000	122,216	2,178,000	1,089,000
1930	15,900,000	6,400,000	190,000	80,516	3,163,600	1,740,000
1931	15,900,000	5,800,000	160,358	59,677	3,320,000	1,745,000
1932	15,800,000	7,000,000	1,170,818	904,605	3,601,000	1,830,000
1933	14,000,000	6,000,000	170,276	59,178	4,245,900	2,007,000
1934	16,000,000	7,000,000	288,895	109,966	5,507,300	2,562,800
1935	20,500,000	9,200,000	320,265	148,728	6,642,400	3,231,300
1936	22,700,000	10,800,000	364,201	180,690	7,097,700	3,820,900
1937	30,600,000	15,400,000	441,103	201,386	7,716,000	4,399,700
1938	31,100,000	14,600,000	411,049	170,326	8,626,800	4,961,100
1939	38,700,000	25,100,000	668,307	409,860	10,395,200	7,014,900
1940	37,100,000	26,000,000	362,155	143,145	11,130,800	7,681,800
1941	33,800,000	17,600,000	116,808	9,878	12,374,300	7,133,600

Table I.
Sales volume of selected Agfa products for amateur photographers, 1926-1941

Sources: For 1926-1938 see: Berghoff and Kolbow (2010, p. 157); Figures for the years from 1939-1941 adapted from: IG Farben Detaillierter Geschäftsbericht (1940-1941). Domestic figures following 1938 refer to the territory of Greater Germany

such an extent during the Great Depression – is remarkable. For Agfa, it constituted a breakthrough into the camera market. While the crisis caused a decline in sales, Agfa never posted any losses. Turnover dropped from 100,100,000 (1929) to 71,700,000 RM (1932) and in amateur sales (excluding the professional motion picture business and some peripheral assortments) from 66,500,000 (1929) to 51,600,000 RM (1932). 1933 was even worse with 64,600,000 and 46,700,000 RM, respectively. Yet in 1932, profits still amounted to 10,900,000, making the company's profit-turnover margin 15.1 percent (Tables II and III). As exports were increasingly worrisome due to trade barriers and the worldwide devaluation of currencies, Agfa strengthened its sales efforts in Germany. Whereas amateur sales comprised only one-third of domestic turnover in 1926, by 1932 they made up nearly half. In Germany, Agfa was the uncontested national champion. At the end of the Weimar Republic, IG Farben's photo division was in a very good position and had no business-related causes to call for a political shift. Nonetheless, Agfa's increasing orientation toward its domestic market unintentionally anticipated a central element of Nazi economic policy: the autarky drive. This, along with the party's goal of favoring mid-sized over giant companies, did give Agfa leaders cause for concern, particularly since Agfa continued to pursue its export interests. The worst-case scenario after a political regime change would have been a ban on the home market and heightened export restrictions. Yet the interest the Nazis displayed in photography also seemed to open up entirely new opportunities that Agfa's marketing division did not want to miss.

The "Volksgemeinschaft" in the viewfinder of the Nazi regime

Even when the NSDAP was still an opposition party and unable to provide comprehensive photo coverage through 1932, photography was central to its media

Year	Turnover	Profit	Profit-turnover ratio
1926	41,400,000		
1927	62,000,000		
1928	84,900,000		
1929	100,100,000	10,700,000	9.3
1930	83,600,000	5,600,000	6.7
1931	80,800,000	10,500,000	12.9
1932	71,700,000	10,900,000	15.1
1933	64,600,000	11,600,000	17.9
1934	65,500,000	9,800,000	14.9
1935	76,300,000	12,300,000	16.1
1936	82,800,000	16,900,000	20.4
1937	95,300,000	22,900,000	24.0
1938	104,800,000	22,900,000	21.8
1939	137,400,000	35,100,000	25.5
1940	150,800,000	34,400,000	22.8
1941	170,500,000	56,000,000	32.9
1942	175,000,000		
1943	199,400,000		
1944	164,100,000		

Sources: Adapted from Plumpe (1990), Schmelzer and Stein (1969)

Table II.
Agfa turnover, profits and profit-turnover ratio from photographic goods, 1926-1944 in Reichsmark and percent

Year	Germany	Share from consolidated turnover	Foreign countries	Share from consolidated turnover	Consolidated turnover
1926	10,100,000	30.8	22,600,000	68.2	32,700,000
1927	15,200,000	35.0	28,200,000	65.0	43,400,000
1928	22,800,000	38.9	35,700,000	61.1	58,600,000
1929	27,300,000	41.0	39,300,000	59.0	66,500,000
1930	26,400,000	42.9	35,000,000	57.1	61,500,000
1931	24,100,000	43.1	31,700,000	56.9	55,900,000
1932	25,300,000	49.0	26,300,000	51.0	51,600,000
1933	21,200,000	45.4	25,500,000	54.6	46,700,000
1934	23,000,000	47.7	25,200,000	52.3	48,200,000
1935	27,700,000	50.1	27,600,000	49.9	55,300,000
1936	31,100,000	51.8	29,000,000	48.2	60,000,000
1937	38,600,000	55.7	30,600,000	44.3	69,200,000
1938	40,900,000	54.6	34,000,000	44.4	74,900,000
1939	60,800,000	66.6	30,500,000	33.4	91,300,000
1940	61,900,000	66.3	31,500,000	33.7	93,400,000
1941	55,400,000	57.2	41,500,000	42.8	96,800,000
1942	62,700,000	60.6	40,700,000	39.4	103,400,000
1943	53,900,000	45.7	63,800,000	54.3	117,700,000
1944	54,300,000	59.5	37,000,000	40.5	91,300,000

Source: Adapted from Bayer Archives (n.d.)

Table III.
Agfa domestic, foreign, and consolidated turnovers from photographic goods for amateurs, 1926-1944, in Reichsmark and percent (including X-ray business, excluding professional motion picture business)

canon. However, in 1933, amateur photography achieved a new status in its eyes. Having integrated all German photojournalists into a system of press control, the regime, via Goebbel's Ministry of Propaganda (RMVP)[1], sought to gain access to amateur photographers, too (Sachsse, 2003). In November 1933, during the exhibition "The Camera" organized under his auspices, Goebbels declared private photography a state interest and called for direct regulation.

At first, the regime preferred to influence amateur photographers via an already existing organization, the "Association of German Amateur Photographers' Clubs" (VDAV) – an umbrella organization encompassing 211 local clubs with about 12,000 members in 1931 (Wulf, 1998, p. 19). Bringing together "serious amateurs", primarily from the upper-middle class, but excluding professionals and "snapshooters," the association had high aesthetic standards and considered photography an art form and a matter of national culture. Intended to serve as the core of a future mass organization that would provide technical training, the VDAV sought to encourage and collect photos that supported the government, such as contemporary photos that documented prestigious infrastructure projects, and family pictures that promoted the ideal of an Aryan society (Starl, 1995, pp. 100-101). Citizens were supposed to photograph significantly more than before while simultaneously affirming the regime's ideology in pictures. This demonstrates how closely interwoven the regime's consumption policy and racial ideology were. Private photography was meant to strengthen a socially homogeneous "Volksgemeinschaft," or national community. However, no systematic campaigns addressing amateur photographers followed these official statements as the ministry lacked a coherent concept to organize the snapshooters. Goebbels preferred to focus on the film industry and the press photographers as these had far greater multiplier effects. The only incentives for amateur photographers were photo competitions, but these generated little response (Sachsse, 2003, pp. 27-8, 62-8).

As the VDAV in no way wished to depart from its elitist self-perception, it failed to establish itself as planned as the official umbrella organization for private photography in Nazi Germany. In fact, its membership dropped to 8,500 in 1935 (Starl, 1995, p. 100), while the estimated number of camera owners rose from 4,000,000 (1930) to 5,000,000 (1934) (Berghoff and Kolbow, 2010, pp. 136-137). Consequently, the RMVP replaced the VDAV's leadership, renamed it the Reich Association of German Amateur Photographers (RDAF), and embarked on a half-hearted membership drive – at first without success. In 1937, membership dropped to only 6,200, but rose as high as 14,000 in 1941. The scarcity of photo materials may have contributed to this increase as the RDAF received preferential treatment concerning supplies (Wulf, 1998, pp. 31, 71, 79).

Despite this increase, the club's membership only encompassed a small fraction of the estimated 7,000,000 camera owners in 1939 (Starl, 1995, p. 98). In contrast to its treatment of hobby musicians, the regime did not force people to join official organizations, probably because it lacked the capacities to register all camera owners. More important, though, was its lack of will to bring all free time activities into line. As the population complained ever more about the many compulsory organizations, the regime allowed for spheres where individuals could spend their free time as they wished, which helped maintain the illusion of normalcy and freedom. The regime's half-hearted club policy did not provide Agfa with an effective vehicle for reaching the mass market, so Agfa principally targeted the unorganized mass of snapshooters. The regime's tactical concession to tolerate apolitical spheres of consumption opened up

plenty of room for Agfa's marketing personnel to maneuver within. While specialist niche organizations like the VDAV/RDAF turned out to be not worth canvassing, Agfa, nonetheless, did address more popular state-controlled mass organizations such as the Hitler Youth, as the following section will show.

A failed strategy: politicized marketing

Professional marketing managers must anticipate and adapt to political change. The directors of the Agfa sales department, Wilhelm Otto and Bruno Uhl, were very adept at gearing product policies to the new political climate. Like many of their colleagues, they had no formal training as advertising experts or marketers but relied on their intuition and experience. Uhl, especially, was interested in the psychological analysis of consumer behavior. He worked with external advisors and developed a flair for sensational sales campaigns. For example, in 1932 when pupils brought their report cards home, Agfa cooperated with the Prussian Ministry of Education to give 50,000 box cameras to the best pupils in each grade level (Götz, 2002, p. 18). In this case, the cooperation with the government proved most valuable. After 1933, Agfa wished to intensify this strategy as the potential of Nazi mass organizations appeared very attractive. It combined the now traditional approach of boosting consumption of film within expensive entry-level cameras with elements of political opportunism.

This attitude to the regime accorded perfectly with that of IG Farben's general management, which seldom agreed with Nazi ideology *per se* but largely displayed a pragmatic willingness to cooperate. Increasing regulation of private motion picture companies, and their nationalization after 1937, made close contacts with propaganda functionaries necessary. After all, Agfa was the Reich's largest supplier of cine film.

The Agfa sales department sought to cooperate with the regime in other arenas as well. In March 1933, Agfa noted that the regime was pushing "school propaganda" very hard, as well as for "political associations like the Stahlhelm, the Nazi Party [. . .]" (IG Farben Besprechungsprotokoll 14 March 1933). In early 1934, Uhl wrote to the head of the large state-controlled leisure organization "Strength through Joy" (KdF), Robert Ley, to convince him of the "educational, cultural and propagandistic" benefits of integrating photography into the program (Uhl to Ley, 1934). Ley had visited the Goebbels-chaired fair "The Camera" in November 1933, when photography became topical. In fact, Agfa's initiative resulted in the launch of KdF teaching seminars two years later. Agfa also sought to target specific political groups for camera sales, but these campaigns encountered some resistance. The regime did not wish to see its political symbols instrumentalized without authorization as this trivialized them. In Spring 1933, prompted by an avalanche of advertising that "profaned" swastikas and portraits of Hitler, the state established several laws and the foundation of acontrol institution, the Advertising Council of the German Economy. Though supervised by the RMVP (Berghoff, 1999, pp. 82-87), among its members were representatives of private business – like Bruno Uhl. Although the wording of the state laws was vague, leaving some wiggle room for advertisers, it was sufficiently clear that affixing such symbols to objects was prohibited when they only served commercial or decorative purposes.

In this climate, Uhl's sales team turned to the Hitler Youth (HJ), offering to produce a camera specifically for the organization in Spring 1934, but no agreement was ever reached. Since Agfa was about to add the new "Billy Clack" model to the folding

camera line anyway, as it allegedly appealed more to younger buyers, the company sought to make a special edition for the Hitler Youth. This idea aroused great interest among some HJ functionaries – especially because of the licensing fees they could expect. Reich Youth Leader (RJF) Baldur von Schirach had "on principle, nothing to object to in the launch of such a camera," but conveyed that he "would like to have specific proposals concerning the financial side" beforehand (RJF to IG Farben, 1934a). In response, Agfa sent him a prototype and proposed that Agfa pay half a Reichs mark per camera sold to support the HJ in exchange for the exclusive right to use the HJ emblem on cameras and perhaps to name it the "Hajot" (HJ). Schirach brusquely rejected these demands on the grounds that "the contract in this form would grant your company a monopoly position" (RJF to IG Farben, 1934b).

Agfa then tried to mollify the HJ with a more defensive offer. The sales department wrote Schirach that Agfadid not expect a monopoly over HJ business; it did, however, hope that the HJ would favor Agfa cameras and that its offices would be informed of the RJF's permission for the emblem's use. Further, this second offer specified that Agfa be given an opportunity, should other firms seek to gain the same right, to negotiate with the RJF and these firms to determine how "competition damaging to the economy could be avoided" (IG Farben to RJF, 1934). As this contract essentially still amounted to an exclusive agreement, the RJF halted negotiations in July, pointing to party guidelines that discouraged product recommendations and turnover commissions.

While other camera manufacturers introduced models specifically targeting the HJ in 1933, or offered previously available products under the new HJ motto (Götz, 2002, pp. 38-45), Agfa never got past the planning phase with its HJ "Billy Clack" camera. The German Kodak branch peddled a box-type camera, the "Brownie Junior," with a brochure highlighting its suitability for camps and excursions that included images of boys in HJ uniforms and a flag with an implied swastika. Similarly, Zeiss Ikon used the motif of a boy in a HJ uniform and bandage with a recognizable swastika to introduce the "Baldur" box camera in Summer 1933. Agfa, however, was more cautious. As a member of the Advertising Council, Uhl knew the regulations and loopholes but also that he could not afford to break the rules: the danger that the regime would make an example of him or Agfa was too great. Consequently, Agfa adhered to the rules more strictly than these competitors.

Other reasons Agfa never proceeded with the HJ camera included the unattractiveness of the offer and bad timing. The Agfa sales department had succeeded in wresting permission from the RJF to name the camera "Hajot" ("nothing from our side stands in the way[. . .]" the RJF had written) because this was not a registered trademark (RJF to IG Farben, 1934c), but the RJF did not grant Agfa an exclusive franchise. The sales department did not see great benefits in this: "It's certain that the planned close cooperation with the Reich Youth Leadership is not possible [. . .]. Therefore, we must rely completely on ourselves and, at best, on cooperation with the appropriate press of the youth movement. In these circumstances, the sales prospects, of course, have become much less secure" (IG Farben to Munich works, 1934). In addition, the negotiations had taken too long for the plan to be realized during Summer 1934. Trying to sell an HJ camera in the cold months made little sense as the organization focused so heavily on outdoor activities. Thus, Agfa did not plan to introduce the camera before 1935 and then never did, likely because the risk turned out

to be greater than expected gains. Besides, market conditions had worsened as the surprisingly modest sales of the standard "Billy Clack" and other similar, low-mid-range models indicated. The window for marketing a HJ Billy had closed. As the regime had failed to follow up on its declarations to stimulate amateur photography and grew more restrictive in authorizing Nazi products, the prospects were poor. Disappointed by the unpredictability and opacity of the Nazi bureaucracy, Uhl criticized the "chancellery tone" of the Advertising Council's regulations, which he characterized as "unclear and complicated for the layman" (Uhl, 1936, p. 538). He was not, however, held accountable for this statement.

Although Agfa utterly failed in its opportunistic attempt to pursue a politicized product and advertising policy, it nonetheless selectively continued to seek out cooperation with the regime. It was more successful in its cooperation with the popular Nazi leisure organization KdF, which launched training courses for amateur photographers in January 1936, two years after Uhl suggested them. Course participants, mostly unequipped beginners and snapshooters – Agfa's primary target group – received cameras and complimentary photosensitized material. Alongside with other companies, Agfa was heavily involved in preparing these seminars, sharing suggestions on carrying them out and negotiating camera and film supplies. In November 1935, Uhl had more than 150 cameras sent to the KdF regional offices as "teaching devices" (Uhl, 1935). Moreover, Agfa financed a guidebook for beginning photographers, "Family History in Pictures," which was not only dripping with Nazi ideas but was also co-written by an Agfa-employed education lobbyist, Richard Lange (Elsner to Uhl, 1938). Agfa clearly believed that this sort of brand management held great promise, as shown in its immediate positive response to KdF's 1937 request to obtain Agfa's new "Karat" still camera line – with which it had just entered the brand-new yet booming 35-mm high-precision camera and roll film market. Uhl wrote to his staff: "These cameras should be funneled off production and delivered immediately when they are finished as it is extraordinarily valuable to us that 'Strength through Joy' get lessons in 35-mm photography with the help of Agfa Karat cameras"(Uhl, 1937, p. 18). The opportunity for nearly free advertising through the KdF was timely because Agfa's Karat was lagging considerably behind the popular 35-mm models of Kodak (Retina), Ernst Leitz (Leica), and Zeiss Ikon (Contax). Another example of Agfa's cooperation with the regime concerned the development of color photography. Agfa and Kodak had independently developed two different processes in 1935/1936 that made color photography feasible for a wider group. There is no proof that the regime directly fostered the development of color photography. Nonetheless, Goebbel's ideologically charged wish to have "German color film" contributed significantly to Agfa color film's rise from 1939 on. This success kept Agfa's research and production running, allowing Agfa to hope for a competitive advantage after the war (Karlsch and Wagner, 2010, pp. 97-99).

In retrospect, Agfa's opportunistic attempts to align its marketing with the early Nazi dictatorship proved to be dead-ends. The regime turned out to be an unpredictable partner, and Agfa, as a part of IG Farben, may have suffered from the propaganda against big business. Thereafter, Agfa shifted primarily to apolitical marketing, not to oppose the regime but, ironically, swiveling into line with general consumption policy, which aimed to distract citizens from the otherwise comprehensive and rigorous collective organization of society. Agfa's renunciation of politics-oriented marketing

for strategies common to Western democratic societies was solely a business decision based on its experiences with the market and the regime rather than a political statement. The management was essentially indifferent to Nazi ideology. The apolitical advertising strategies Agfa applied then, however, did not rule out collaboration with the Nazi state.

"Always a good friend": selling a leisure product during the armaments drive

Unlike the nationalized movie industry, the amateur photography sector remained solely market driven. Although Agfa maintained contacts with the RMVP and KdF, it essentially acted as it would have in a market or peace economy. In Spring 1933, it followed its "Price Box" campaign with an offer for buyers to exchange these cameras for the new "Billy Record" and apply the full price of the Price Box toward the purchase. In 1933, Agfa sold 79,000 Billys – over 50 percent more than in 1931 or 1932, which the sales managers attributed to this appetizer strategy. They took this resurgence as confirmation of their "theory that the Box would animate the sale of mid-price-range cameras"(IG Farben Jahresbericht 1933, p. 8). Agfa did not destroy the Boxes but used them in other sales campaigns for the new roll film "Agfa Isochrom." In July 1934, an airplane with "Isochrom" painted on its wings flew over North and Baltic Sea resorts dropping rubber balls, including "lucky" ones entitling holders to receive free Agfa Price Boxes. Agfa also generated quite a sensation by chartering steamships to cruise along the coastlines, long before such cruises were commonplace. While on board, passengers using their own equipment, who obtained tickets for free at photo shops, received photography instruction from trained presenters (Götz, 2002, pp. 24-25). Once sales and revenues had returned to the growth trend of pre-Nazi years in 1935, Agfa dispensed with such campaigns, utilizing 70 percent of its advertising budget on newspapers, posters, brochures, and window displays through 1940. This relatively high budget, which fell in the lower-mid-range as a share of overall turnover compared to other companies for this period, rose with turnover and allowed the brand to maintain a strong media presence well into the war (Reinhardt, 1993, pp. 35-44). In 1938, it amounted to 4.5 percent, and it never fell below the pre-Depression level (Table IV). During the 1936 Olympic Games in Berlin, Agfa distributed a calendar of events to 250,000 tourists (Plate 1). These campaigns were developed in-house, while

Table IV.
Advertising budget for photographic goods of IG Farben division Agfa 1929-1930 and 1935-1940 in Reichsmark and percent

Year	Advertising budget for photographic goods	Share of Advertising budget in relation to turnover
1929	3,600,000	3.6
1930	3,500,000	4.1
1935	2,800,000	3.6
1936	3,000,000	3.7
1937	4,100,000	4.3
1938	4,500,000	4.5
1939	4,600,000	3.3
1940	5,200,000	3.4

Sources: Adapted from IG Farben (1930, 1935-1941)

Source: "Werbung für Produkte der Agfa, 1918-1996", 162/8, Bayer Archives, Leverkusen

Plate 1.
"Take pictures with Agfa – you can always count on it": Calendar of Events for the Olympic Games in Berlin as an Agfa giveaway

their design and scheduling was outsourced to the agency Ala Anzeigen and, from 1934, also to the German branch of the US agency Dorland.

The 1930s marked a significant stage in Agfa's long path to the mass market, when it replaced its relatively undifferentiated "mass marketing" with more targeted appeals. The products specially designed for pupils and HJ members already suggest rudimentary "segment marketing." The sales department had established that customers' "particular use and available means" stood "in close relation to [their] age and gender [...]" (Agfa Amateur Katalog 1938, p. 2) and began to systematically

differentiate its approach by these criteria. It recommended special cameras for three sectors:

(1) youth (sturdy);

(2) women (small, easy-to-use); and

(3) men (technically versatile).

In 1938, for example, it released a total of 14 camera models, recommending nine to youths, 11 to women, and ten to men with some overlap.

Alongside its consumer marketing, Agfa continued to pursue time-tested cartel strategies it had utilized before 1933 that were clearly in producers' interest. Agfa and other large manufacturers sought to establish cartels in order to reduce market uncertainty at the expense of minor competitors and retailers and – as a side effect – benefiting consumers. Although the Nazi Party had proclaimed it would support "mid-sized companies" to the detriment of large corporations, economic authorities not only tolerated cartels but actively fostered them, above all because they lowered prices. As in other industries, cartels for photographic goods *de facto* strengthened the larger companies (Schröter, 1996). Conflicts within the sector usually were resolved in Agfa's favor.

This balance of power seemed to be tipping briefly in Spring 1933 when a coalition of mid-sized companies publicly revolted against Agfa. Spurred by Nazi anti-trust propaganda, minor manufacturers joined specialized photography retailers to protest Agfa's "market-damaging" hegemony. While Agfa then dropped the most ambitious of its current cartel arrangements, the "amateur film convention," in July 1933 after only six months, this resulted from internal discord rather than state intervention. Conceived during the Great Depression, this convention had coordinated the price of roll film, then the top-selling product for snapshooters, which lowered the margins for retailers and small factories. Nonetheless, Agfa succeeded in exercising its market power without restraint. In fact, the new official Reich business associations – designed to better control the economy – fostered the power of the giants. Since managers from Agfa and other large companies held top positions in these bodies, they were more likely to represent the interests of large-scale industry, and Agfa and other giant manufacturers were clearly able to continue dictating retail prices and selling conditions throughout the "Third Reich."

All in all, it seems that the Nazi state perpetuated and instrumentalized the tradition of cooperative capitalism in the photo industry and even encouraged it by means of state-induced cartels. Consequently, this particularity of the Nazi economic order ultimately benefited consumption. One such cartel, the "Vertragsgemeinschaft Film" established in 1938, in a way revived the amateur film convention, coordinating retail prices and retailers' margins. In the tangle of contradictory aims of Nazi economic policy, the regime clearly prioritized promoting mass consumption over cultivating mid-sized companies and refrained from reining in Agfa's market power. Lower prices on popular film products were in the regime's interest, and Agfa achieved these by consistently implementing economies of scale. In 1936, when the small manufacturer Schleussner wished to give retailers higher margins than large firms to compensate for its lower brand awareness, Schleussner's complaint about Agfa fell on deaf ears at the Reich Ministry of Economics. The responsible bureaucrats found Agfa's argument that setting lower margins would "make the sales price for the product roll film as cheap as possible,

so that the largest possible circles of the public can get involved in photography" persuasive (Otto, 1936). This example demonstrates differential development in corporate marketing strategies. Schleussner assumed that higher sales provisions would motivate retailers to sell its products to malleable customers. Agfa's sales department, however, more realistically ascribed strong brand awareness to consumers. Thus, the photo shops – despite the lower profit margins – preferred to sell strong brand-name products, in the end utilizing a high-volume/low-margin strategy. Agfa's history shows that cartelization did not necessarily inhibit progress in marketing practice.

Against the backdrop of its unsuccessful negotiations concerning the HJ camera, Agfa shifted to mainly apolitical consumer marketing strategies. Although the sales directors retained some political references for the enticing transfer of images to Agfa's branding, they only subtly took up national events or trends like the increasing militarization of German society without infringing on the rights of Nazi symbols.

More than before, Agfa print advertisements highlighted the recreational value of photography. With motifs of idyllic landscapes and beach vacations, Agfa subliminally tied its ads to central Nazi images, which were equally influenced by romantic traditions and mass consumption. The accompanying texts mostly focused on technology and praised Agfa products' superior quality. Alongside other German advertisers in the 1930s, Agfa adapted especially the formal structure of select American models (Ross, 2007). Like US ads, Agfa's had large pictures and eye-catching headlines that presented products' benefits without slogans or even rhymes. The poster style, with attention-grabbing but artificially arranged scenes and brief messages, was passé. Nonetheless, ads continued to be more product- than consumer-oriented and suitably reserved. They were not "hard-selling copy" but conventionally modest explanations of products' typical uses. Pictures of consumers seemed more like window-dressing than focal points. Unlike contemporary US ads, Agfa's did not appeal to "human interest" or emotions (Plate 2). Agfa's advertising was a long way from employing subliminal psychological messages. At the same time, Agfa, like most German companies, decidedly ignored Nazi style directives, such as using the Fraktur typeface, volkish motifs, and messages supporting the regime's autarky policy that would have contradicted its sales interests. If advertising in Germany was supposed help steer consumption and overcome the capitalistic principle of stimulating demand, the reality was very different. Agfa clearly pursued a business-motivated strategy to attract new customers and, in general, to expand consumption in the photography sector.

When soldiers consume civil products: photography and the military, 1935 to 1945

From 1935/1936, Agfa increasingly addressed soldiers, although they were not yet its primary focus. In 1936, Agfa's customer magazine *Photoblätter* described them as discerning consumers: "The modern soldier is [. . .] not only familiar with weapons, no, he [. . .] takes photographs" (cited in Starl, 1995, p. 113). In 1938, Agfa introduced the "Isolette," a camera made of "Trolit," a new synthetic material supposedly much more durable than metal. Encased in "Robusit," a leather-like "armor," this model, the "soldier camera with the accurate viewfinder" (Agfa Amateur Katalog, 1938, p. 11), was typical in the "Four-year plan" era after 1936, when manufacturers were encouraged to substitute imports with domestic or synthetic materials. Once the war started, Agfa focused more heavily on soldiers, touting its films as ideal for conveying

Plate 2.
Leisure-related Agfa advertisement created by US-controlled advertising agency Dorland

Source: *Berliner Illustrirte Zeitung* (1938, 2 June, p. 845)

emotions over a long distance between soldiers and their families. For example, pictures could communicate soldiers' good health or families' enjoyment of everyday normality. In 1940, an "Isopan" film ad featured a soldier saying "I'm all right!" (Plate 3). Another installment featured two young women relaxing at a swimming pool. Highlighting the short-lived pleasure of vacation, it recommended documenting this feeling in pictures to preserve it and cheer up husbands on the front. Likewise, Agfa encouraged soldiers to record the war "with the most modern and progressive means, color photography" (cited in Bopp, 2009, p. 43). The campaign's recurring slogan was "Agfa film – always a good friend" (Plate 4).

By 1939, photography among soldiers had become commonplace; about one in four had his own camera. Troops needed diversion between their deployments. A veritable hype broke out in 1939 and 1940 from the record sales of cameras to soldiers (Starke, 1940, p. 435). Between 1939 and 1942, Agfa sold more than 1,000,000 Box und Billy Cameras and 100,000,000 rolls of film. Except for 1932, when the "Price Box" campaign spurred sales, Agfa had never sold more cameras in the IGFarben era; 1939 also set a record for that period in sales of roll film, with turnover of 38,700,000 rolls (Table I).

For many soldiers who had never left their home regions before 1939, the war also had a touristy quality (Koshar, 2000). They spent free time sightseeing and wished to photograph their experiences. Photo consumption on the part of civilians and soldiers was inextricably intertwined. The military postal service sent photos in both

Source: *Die Wehrmacht* (1940, 27 March, p. 19)

Plate 3.
"I'm all right!" – Agfa Second World War advertising campaign "Agfa film – always a good friend"

directions. Cameras and film materials purchased in Germany traveled from vacationers into the field, and soldiers could send exposed film free via the army postal service to retail shops where they had prepaid customer accounts for printing. Particularly entrepreneurial retailers sometimes settled near the front or mobile military hospitals. Wehrmacht leaders permitted and expressly encouraged this extensive photo-taking as a meaningful free time activity and considered photos from home psychological stabilizers. They even allowed pictures of the front that did not "touch on important military matters." Merchants permitted soldiers, unlike civil

Plate 4.
"Happy vacation days" – Agfa Second World War advertising campaign "Agfa film – always a good friend"

Source: *Berliner Illustrirte Zeitung* (1940, 13 June, p. 581)

customers, to order unlimited quantities, and some occasionally requested up to 1,000 prints of a single negative (Starke, 1940, p. 434). Only in the navy was there a general prohibition on photography. Although the Army, Air Force, and SS sometimes set limits on photography, the regulations, which increased from 1941, were neither precise nor enforced (Schmiegelt, 2000). In addition, professional and private photos were hard to distinguish. Often amateur photographers helped out when professional photographers were unavailable. The Wehrmacht and the Waffen SS organized competitions and exhibitions, giving troops generous quantities of film and prints in exchange for their participation (Boll, 2002, pp. 76-81).

Whereas troops had plenty of photo supplies, civilians experienced increasing shortages. By 1941, most camera manufacturers could no longer fulfill orders; in ads, they consoled potential buyers with reference to the post-war period. Raw material shortages exacerbated the situation in 1943, when cameras were no longer sold, although photographic film and paper were still available. DirectiveV43 of the Reich Office for Chemical Products of 6 March 1943 aimed to regulate the sale and development of photosensitized materials by stipulating that, from July 1943, only members (and their families) of the Wehrmacht, Waffen SS, Reich Labor Service, and other organizations could purchase materials for private pictures of persons that served "to maintain the connection between the front and home." It prohibited pictures of flowers, animals, landscapes, and such, though this was probably ineffective due to the large number of privileged consumers and merchants' lack of interest or ability to interpret the regulations strictly and carefully review all their orders (Starke, 1943).

Even after the battle of Stalingrad had made Germany's defeat almost certain, the regime never forcefully impeded this consumption practice to completely devote photo industry production to armaments, although dwindling supplies made it ever more difficult to engage in private photography. Agfa continued to produce films while its Munich camera factory completely converted production to making bomb fuses in 1942 (Fengler, 2009, p. 59). Still, Agfa had no interest in long-term war production and planned to resume its regular consumer-goods-oriented growth strategy as soon as possible. Expecting Europe to become a unified trade block dominated by Germany, the sales department had already secured numerous advance orders from retailers and forecast a sales increase of 30 to 100 percent. Even in April 1941, Agfa remained optimistic: sales director Otto instructed the design department in Munich to work as though peace were at hand (IG Farben Besprechungsprotokoll, 30 April, 1941).

As for advertising, the regime had recommended that manufacturers with insufficient supplies continue to advertise brands without specific products to convey normalcy and promise consumers better times after the war. Although Otto objected and told the sales department to continue promoting particular products to prevent customers from thinking Agfa had supply problems (IG Farben Besprechungsprotokoll, 16 July 1940), Agfa fell in line with the regime, mostly advertising only the brand from mid-1941, typically with the simple logo and slogan "Agfa Means High-Quality Photographic Workmanship."

Although civil film production continued in Wolfen until late 1944, state authorities did not allocate sufficient raw materials and labor. Despite a dramatic decrease in the permitted output in 1942 and 1943, Agfa was still allowed to supply half of civil film demand as long as it did not interfere with supplies for the armed forces and other authorities (Gill, 2006, p. 29). Thanks to government concessions, Agfa even managed, despite tremendous obstacles, to manufacture Agfacolor materials until 1945. The RMVP declared the manufacture of Agfacolor "crucial to the war effort" on 16 December, 1944, after management complained of shortages. However, by March 1945, only emergency production for the Wehrmacht, such as film for aerial photography, remained possible. War-time production only ended in April 1945 when US troops marched into Leverkusen, Wolfen, and Munich (Gill, 2006, pp. 36-39).

Selling photography: Agfa's business in numbers

For some years into the war, Agfa managed to perform impressively. A trend toward increased sales continued until 1944, and even then, sales outstripped the prewar period. Profit growth was strong until 1941, with the profit-turnover ratio regularly reaching 20 percent or more. Unfortunately, there are no statistics on this for the later war years (Table II).

Agfa managed to survive the Great Depression with a mere 35-percent decrease in turnover (1929-1933). In the first Nazi years, when Agfa applied politicized strategies, recovery was slow. In contrast, turnover grew 62 percent with a leisure-oriented, apolitical marketing strategy from 1936 to 1939, even though it did not achieve the pre-crisis level of 1929 again before 1938. From 1933 to 1939, turnover doubled, rising to 137,400,000 RM. Thereafter, business grew more slowly but still significantly until it peaked at 199,400,000 RM in 1943 (Table II). Amateur photography sales bounced back faster, exceeding the 1929 record of the Weimar years in 1937 (69,200,000 RM) (Table III). Agfa's home market recovered faster than exports. By 1935, German sales of amateur photography goods (27,700,000 RM) surpassed the 1929 level. In the early 1930s, Agfa's business centered on the domestic market. Foreign trade increased until the war turned, too, although it significantly underperformed compared to domestic sales due to unfavorable exchange rates, tariff barriers, and boycotts of German goods (Table I). In 1936, the German market generated more than half of amateur sales (51.8 percent) for the first time, with this share rising to 66.6 percent in 1939. Amateur photography turnover in the prospering domestic market nearly tripled between 1933 and 1939 from 21,200,000 to 60,800,000 RM. In the war years, foreign trade increased slightly, although it remained weaker than domestic trade.

Agfa's profit rose even faster than turnover. Neither currency depreciation against the Reichsmark, nor Nazi price regulation efforts, significantly harmed its earnings. Only in 1934 did profits fall with the 42 percent depreciation of the US dollar. Between 1933 and 1939, profits tripled from 11,600,000 to 35,100,000 RM and grew steadily to 56,000,000 RM in 1941. Growing German amateur sales enabled Agfa to more than compensate for the dramatic deficits in some export markets. Under these conditions, Agfa was able to extend its leading position in Germany through 1939. Agfa's market share of its top-selling photographic roll film product rose from 47.7 percent in 1933 to 70 percent in 1939 (Uhl, 1938, p. 11).

Agfa's sales volume reached new dimensions during the Nazi era. Amateur roll film sales rose steadily until 1939, when Agfa sold 38,700,000 rolls worldwide. Annual sales then declined slightly through 1941, though they still surpassed peacetime levels. Sales of photographic paper also grew through 1941. Only the fine mechanical side of the business suffered dramatically, dropping from more than 660,000 cameras worldwide in 1939 to just under 117,000 cameras in 1941 (Table I). While 1939 sales far exceeded the pre-Depression sales record, they still did not approach the success of the 1932 "Price Box" campaign, which contributed to more than 1,170,000 cameras being sold.

Despite its growth in absolute numbers, the camera business never met Agfa's expectations. In 1938, Uhl (1938, p. 12) acknowledged that Agfa could not compete with the "pioneering position of the Zeiss Ikon and Kodak camera works." At that point, Agfa was the fifth largest camera manufacturer in Germany, with a 7 percent market share, down from 20 percent in 1933. This reduced Agfa's average market share for all product categories, which Uhl calculated to be 32 percent in 1937, though he surmised

it would have been 56 percent without the weak camera business (Uhl, 1938, p. 12) Thus, he must have found Agfa's failure to negotiate any exclusive contracts with Nazi party offices years before doubly painful. Nonetheless, the company was in a good position overall. Agfa's success in the photography industry was not exceptional – the market for photographic goods generally prospered during the "Third Reich." This rise of this new consumer product remained largely unchecked despite the armament-driven economy. It was less the regime's special measures to promote photography than its tolerance of growth in civil consumption and the effects of the general economic upturn that spurred this development.

Agfa's business remained largely unchecked by the armament-drive. While Agfa accepted a few arms production orders even before the war and manufactured fuses for the Army Ordnance Office in Munich from 1935, the volume of military production remained small well into the war: in 1941, armament products produced in its Munich plant accounted for a mere 7.4 percent of the consolidated turnover of Agfa's 170,500,000 RM business (IG Farben Detaillierter Geschäftsbericht, 1938-1942, p. 1). At the Leverkusen plant, military orders played no role until 1939, when more photographic paper was shipped to the Wehrmacht. Yet even in 1944, civil production accounted for 88 percent of production for domestic and foreign markets (OMGUS, 1945, p. 54).

Conclusion

Throughout the Nazi era, Agfa managers continued to apply normal business strategies. They did not become puppets of a totalitarian command economy. Despite the armament drive, they were long able to conduct their core business – film production – unhindered, and then managed to maintain it, albeit with increasing restrictions, up to 1945. Only in the relatively unimportant sideline of camera manufacturing did the company experience reductions for the sake of armaments, ending in a complete production stop in 1942. As with other consumer goods manufacturers, Agfa's arms production had the character of a compromise or proof of its goodwill towards the regime to ensure that it would be able to carry on its civil business. Although Agfa could no longer stimulate film sales with cheap cameras during the war, pre-war camera sales kept the demand for film quite high.

All in all, Agfa maintained control of marketing and behaved largely as it would have in a peace economy, seeking out the most efficient way to tap into the mass market. Ironically, Agfa found that its opportunistic attempts to curry favor with the regime did not lead to success. Like many other companies, Agfa misinterpreted the new rulers' wishes but quickly and unproblematically switched to more promising approaches. These included positioning its products within an individualistic and, at first sight, apolitical leisure culture, which was very important for stabilizing the regime and making it seem like a "normal living environment." Thus, Agfa conformed to the system not by demonstratively toeing the party line but by consciously distancing itself while suggesting that Germany was a thoroughly civil society where new consumer goods and apolitical hobbies had their place. On this basis, Agfa succeeded, even under the restrictive conditions of the Four-Year-Plan and the war economy, in driving sales of film to new heights with innovative marketing strategies. Only when the war shifted course in 1941/1942 was further growth blocked. At the same time, film and paper sales continued, despite material shortages and air raids up until April 1945.

Agfa's relative autonomy may seem to be the consequence of its product. Film did not have to compete with core areas of the arms industry, mainly because volume was insufficient to conflict with arms production. In truth, though, there were clear conflicts of interest between Nazi leisure and consumer policies, on the one hand, and the demand for photography supplies for military reconnaissance purposes, on the other. The regime long had no need to restrict photo consumption but was unable to when it tried during the war. Consequently, this paper's findings support a middle position in the controversy concerning companies' room to maneuver in the Nazi regime. One must focus research on the specifics of particular firms and products to determine where they fall on the scale between autonomy and restricted action. The findings presented here show that marketing history can also benefit strongly from "bringing the state back in". The role of political and institutional factors deserves further analysis. This line of inquiry challenges the long-standing neoclassical paradigm according to which corporate activity in consumption goods marketing can only flourish in liberal-market economies. Since the statist Nazi regime attempted to legitimate itself by raising the level of civil consumption, consumption goods companies such as Agfa were able to take advantage of market opportunities to much the same extent during the Third Reich as it had under the democratic Weimar Republic or would in post-war West Germany. This case study also shows that the relationship between political regulation and private business strategies is not one-sided but rather a complex interaction of several feedback loops. Even in a dictatorship, corporations are not puppets on a string. On the contrary, there is room for negotiation and active adaptation.

The end of the war and the division of Germany marked a profound break in Agfa's history that changed its corporate structure and threatened its market position. The occupying powers made specialized knowledge about the manufacture of color film available to foreign competitors. Also, Agfa found it difficult to manage the division of labor between its sites in the Western part and the Wolfen film plant in the Eastern part. Cooperation ceased entirely in 1964. Nevertheless, the initiative of former executives and the liberal economic policy of the military government enabled Agfa to start over when its Western plants were restructured as a subsidiary of the pharmaceutical giant Bayer in Leverkusen after IG Farben was dissolved. One high-profile example of personnel continuity was Uhl, who rebuilt marketing and distribution structures and rose through the ranks thereafter, eventually getting promoted to Agfa's executive board. By the time he retired in 1955, Agfa had been able to quickly resume business utilizing its prewar product mix. The Allies had permitted Agfa to expand its photographic paper plant in Leverkusen to include film-manufacturing facilities, and they returned control of the Munich camera factory to Bayer. This set the stage for the rebirth of Agfa's prewar loss leader marketing strategy. Offering a vast line of films and cameras, Agfa still outweighed its German competitors and soon recovered its leading position in West Germany. While Agfa's decision to stick to well-worn marketing and technology paths during Germany's post-war economic recovery succeeded in the short term, it did lead the company into crisis from the 1960s onwards. Along with other, traditionalist Western manufacturers, Agfa failed to capitalize on new trends in photographic technology, such as SLR, instant pictures, and digital imaging, which Asian companies had ushered in (Fengler, 2006, 2009).

Note

1. We use the German language acronyms, which are more common in the research literature.

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